



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,241	11/16/2005	Guldo Vendel	102132-27	3633
27388 7590 08/15/2007 NORRIS, MCLAUGHLIN & MARCUS 875 THIRD AVE 18TH FLOOR NEW YORK, NY 10022			EXAMINER BRANDT, CHRISTOPHER M	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 08/15/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/538,241

Applicant(s)

VENDEL ET AL.

Examiner

Christopher M. Brandt

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

This Action is in response to applicant's amendment filed on June 8, 2007. **Claims 21-32** are still pending in the present application. The request for reconsideration in view of the arguments has been carefully weighed and therefore reconsideration is granted.

Response to Arguments

Applicant's arguments with respect to claim 21-32 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 21, 23-26, 29-32 are rejected under 35 USC 103(a) as being unpatentable over **Masseroni et al. (EP 1 257 096 A2, hereinafter Masseroni)** in view of **Tong et al. (US PG PUB 2003/0123414 A1, hereinafter Tong)**.

Consider **claim 21 (and similarly applied to claim 29)**. Masseroni discloses a method for detecting multiuser behavior on an aerial interface in GPRS and EGPRS mobile radio systems (figures 14 and 15, abstract, paragraph 36), comprising the steps of

acquiring and evaluating during a transmission of subscriber data on an aerial interface, additional information contained in subscriber data by a device on a network side and/or a subscriber side, both in the uplink and downlink (figures 14-24, paragraphs 36-38, read as the establishment of a TBF uplink connection where the network requires to know the number of blocks that a MS mobile intends to transmit. In addition, in the download TBF a buffer is allocated to contain the RLC/MAC blocks to be sent); and

enabling to unambiguously discriminate up to eight users sharing a time-slot (paragraphs 38, 49, read as three bits are foreseen for the USF field that enable to unambiguously discriminate up to eight users sharing a time-slot. In addition, figure 9a illustrates a situation in

which three MS mobiles identified by a same number of connections TBF1, TBF2, and TBF3 share the radio resource assigned to the GPRS service).

Masseroni substantially discloses the claimed invention but fails to disclose identifying a number of parallel subscribers in used timeslots based on the additional information (Masseroni discloses enabling to unambiguously discriminate up to eight users sharing a time-slot (paragraphs 38, 49)).

However, Tong discloses identifying a number of parallel subscribers in used timeslots based on the additional information (paragraphs 19, 20, 57, and 72, read as a plurality of bits to identify one or more user terminals for which the data in the HSD frame is intended).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Tong into the invention of Masseroni in order to reduce the encoding so that the user terminals can easily interpret them (paragraph 19).

Consider **claim 23 and as applied to claim 21**. Masseroni and Tong disclose wherein the acquiring and evaluating step comprises the step of evaluating parameters Uplink Status Flag (USF) and/or Temporary Flow Identifier (TFI) as additional information (Masseroni; paragraph 38).

Consider **claim 24 and as applied to claim 23**. Masseroni and Tong disclose wherein the acquiring and evaluating step further comprises the step of determining for the duration of an uplink TBF, how many USF's are allocated by the network side (figures 15, 17, and 22b, paragraphs 68, 72, 73, 93, 94).

Consider **claim 25 and as applied to claim 23**. Masseroni and Tong disclose wherein the acquiring and evaluating step further comprises the step of determining for the duration of a downlink TBF, how many USF's are allocated by the network side (figures 15, 17, and 22b, paragraphs 68, 72, 73, 93, 94).

Consider **claim 26 and as applied to claim 23**. Masseroni and Tong disclose wherein the acquiring and evaluating step further comprises the step of identifying the USF's and/or TFI's and for each TBF and a combination of all TBF's which are part of the transfer (figures 15-17, paragraphs 69-71).

Consider **claim 30 and as applied to claim 29**. Masseroni and Tong disclose wherein the at least one device is provided in the Packet Control Unit PCU (8) (figures 13, 14, paragraphs 64-66, 74).

Consider **claim 31 and as applied to claim 29**. Masseroni and Tong disclose wherein the at least one device comprises a subscriber-side measurement system, which cooperates with or is integrated in a mobile radio terminal (figures 15-17, paragraph 68).

Consider **claim 32 and as applied to claim 29**. Masseroni and Tong disclose wherein the additional information comprises the parameters USF and/or TFI (paragraph 38).

Claims 22 and 28 is rejected under 35 USC 103(a) as being unpatentable over **Masseroni et al. (EP 1 257 096 A2, hereinafter Masseroni)** in view of **Tong et al. (US PG PUB 2003/0123414 A1, hereinafter Tong)** and further in view of **Tolli (US PG PUB 2006/0014544 A1)**.

Consider **claim 22 and as applied to claim 21**. Masseroni and Tong disclose the claimed invention except wherein the acquiring and evaluating step comprises the steps of

comparing at the beginning of a Temporary Bit Flow (TBF) the number of the used Radio Link Control (RLC) blocks with an actually available and hence usable number of RLC blocks, and the identifying step comprises the step of identifying the number of parallel subscribers in the used timeslots based on the additional information contained in the RLC blocks.

However, Tolli discloses wherein the acquiring and evaluating step comprises the steps of comparing at the beginning of a Temporary Bit Flow (TBF) the number of the used Radio Link Control (RLC) blocks with an actually available and hence usable number of RLC blocks, and the identifying step comprises the step of identifying the number of parallel subscribers in the used timeslots based on the additional information contained in the RLC blocks (paragraph 36, read as the monitoring and the parameter can be base on measuring the number of reserved TBFs compared to the total number of TBFs or number of TBF users in GPRS-based systems).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Tolli into the invention of Masseroni and Tong in order to be able to trigger users to perform cell reselection if a cell load parameter exceeds a pre-set cell load threshold (abstract).

Consider **claim 28 and as applied to claim 21**. Masseroni and Tong disclose the claimed invention except wherein the acquiring and evaluating step comprises the step of evaluating for the entire lifetime of the respective uplink TBF and/or downlink TBF, the RLC data as well as the RLC/MAC control blocks for all TBF's in existence at that time and in all timeslots allocated to the respective TBF, and determining based on these data if a multiuser operation has occurred at the time of the data transmission.

However, Tolli discloses wherein the acquiring and evaluating step comprises the step of evaluating for the entire lifetime of the respective uplink TBF and/or downlink TBF, the RLC data as well as the RLC/MAC control blocks for all TBF's in existence at that time and in all timeslots allocated to the respective TBF, and determining based on these data if a multiuser operation has occurred at the time of the data transmission (paragraph 36, read as the monitoring and the parameter can be base on measuring the number of reserved TBFs compared to the total number of TBFs or number of TBF users in GPRS-based systems).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Tolli into the invention of Masseroni and Tong in order to be able to trigger users to perform cell reselection if a cell load parameter exceeds a pre-set cell load threshold (abstract).

Claim 27 is rejected under 35 USC 103(a) as being unpatentable over **Masseroni et al. (EP 1 257 096 A2, hereinafter Masseroni)** in view of **Tong et al. (US PG PUB 2003/0123414 A1, hereinafter Tong)** in view of **Tolli (US PG PUB 2006/0014544 A1)** and further in view of **Weigand (US Patent 6,963,554 B1)**.

Consider **claim 27 and as applied to claim 22**. Masseroni, Tong, and Tolli disclose the wherein the acquiring and evaluating step further comprises the step of determining, in a static allocation process, the usage of the timeslots for the RLC blocks (Masseroni; paragraph 38)

However, Masseroni and Tong fail to disclose that this determination is based on counting the data frames.

Art Unit: 2617

However, Weigand discloses that this determination is based on counting the data frames (column 16 lines 55-60, read as the frame tick count register can correspond to a predetermined offset to the end of the frame).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Weigand into the invention of Masseroni and Tong in order to allow time for the base station to be able to maintain timing for the system so that it can detect the end of a frame (column 16 lines 61-67).

Conclusion

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Brandt whose telephone number is (571) 270-1098. The examiner can normally be reached on 7:30a.m. to 5p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.



Christopher M. Brandt

C.M.B./cmb

August 7, 2007



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600